Basophil activation test in allergic rhinitis

Authors' reply We are grateful to Dr. Chirumbolo for the comment on our paper describing the correlation between a nasal provocation test (NPT) and a basophil activation test (BAT) in patients with allergic rhinitis (AR).[1] We agree with most of the issues raised by Dr. Chirumbolo, but some points need to be addressed. Differentiation of AR, nonallergic AR (NAR), and local AR (LAR) requires further studies, and the use of the atop-ic patch test seems to be an interesting comple-ment to diagnostic workup, but only in the case of the reaction occurring in type IV hypersensitivity.[2]

Our paper is part of a larger project encompassing studies on the usefulness of the BAT in type I hypersensitivity reactions, which have been conducted for several years by our research team, especially in patient selection for and monitoring of specific immunotherapy (SIT). As noted by Heffler,[3] the need for biomarkers assessing the probability of response to SIT before it is initiated, as well as biomarkers predicting the safety, long-term efficacy, and time to symptom relapse when SIT is stopped, is crucial and is still a hot topic in allergy and clinical immunology research.[3]

Our study[1] focuses on the possibility of replac-ing the NPT by BAT during patient selection for SIT.[1,4,5] We knew the paper by Gomez et al[6] and cited it in our paper. Owing to different aims, we used other inclusion criteria: our patients had a suspicion of AR based on history and the results of SPT or the measurement of serum immunoglobulin E (sIgE) levels, and caused by an allergy to birch or house dust mites. In the second step, all patients underwent the NPT and BAT at the same time, with 2 allergens successively: birch and house dust mites. Gomez et al,[5] referred patients for AR, NAR, LAR, and healthy controls on the basis of medical history and SPT, sIgE, and NPT results at baseline. In the second step, they per-formed only the BAT.[6]

As rightly pointed out by Dr. Chirumbolo, we applied a different method of performing the BAT (ie, Flow2CAST), although we are aware of its limitations. There is no doubt that the BAT can provide a valuable complementary tool in the diagnosis of allergy and in patient selection for SIT. It is likely that in order to further refine treatment choice and, consequently, its effectiveness, it will be necessary to combine the BAT with other tools in the panels of biomarkers.[3] For techni-cal reasons, research on the BAT is conducted on groups of a few dozen patients, so it is necessary to repeat similar experiments in larger populations and using optimized protocols.

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